Amendments to the Specification:

Please replace paragraph **[01]** with the following amended paragraph:

[01] This application is a continuation-in-part and claims the benefit of Non-Provisional U.S. Patent Application 10/002,595, filed November 1, 2001, which claims the benefit of Provisional U.S. Patent Application 60/258,024, filed on December 22, 2000; and which is a continuation-in-part of U.S. Patent Applications 09/783,253, 09/782,927, 09/783,254, and 09/782,804, all filed on February 13, 2001; and which claims the benefit of Provisional U.S. Patent Application 60/308,381, filed on July 26, 2001. Each of these applications is assigned to the assignee of the present application. The full disclosures of each of the above applications is incorporated herein by reference. ~~This application is assigned to the assignee of the present application. The full disclosure of this application is incorporated herein by reference.~~

Please replace paragraph **[46]** with the following amended paragraph:

[46] The total amount of therapeutic capable agent made available or released will typically be in an amount ranging from about 0.1 µg ~~ug~~ to about 10 g, generally from about 0.1 µg ~~ug~~ to about 10 mg, preferably from about 1 µg ~~ug~~ to about 10 mg, more preferably from about 1 µg ~~ug~~ to about 2 mg, from 10 µg ~~ug~~ to about 2 mg, or from about 50 µg ~~ug~~ to about 1 mg.

Please replace paragraphs **[48-51]** with the following amended paragraphs:

[48] In an embodiment the release rate of the therapeutic capable agent per day may range from about 0.001 micrograms (µg ~~ug~~) to about 1000 µg ~~ug~~, usually from about 0.001 µg ~~ug~~ to about 200 µg ~~ug~~, normally from about 0.5 µg ~~ug~~ to about 200 µg ~~ug~~, and typically from about 1 µg ~~ug~~ to about 60 µg ~~ug~~.

[49] In one embodiment, the rate-controlling element is configured to have properties, physical and/or chemical properties (e.g., physical dimensions such as thickness and chemical properties such as polymer chemical structure) such that the flux density of the therapeutic capable agent across the rate-controlling element (or through the matrix as the case may be) to the targeted tissue site ranges from about 1.71x10-14 g/(cm^2s) ~~ug/(cm^2s)~~ to about 1.71x10-8 g/(cm^2s) ~~ug/(cm^2s)~~, usually from about 1.71x10-14 g/(cm^2s) ~~ug/(cm^2s)~~ to about ~~1~~ 3.43x10-9 g/(cm^2s) ~~ug/(cm^2s)~~, normally from about 8.57x10-12 g/(cm^2s) ~~ug/(cm^2s)~~ to about 3.43x10-9

g/(cm^{2}s) ~~ug/(cm^{2}s)~~, and typically from about 1.71x10-11 g/(cm^{2}s) ~~ug/(cm^{2}s)~~ to about 1.03x10-9 g/(cm^{2}s) ~~ug/(cm^{2}s)~~. The desired flux ~~flex~~ density is affected by the total interfacial area between the therapeutic capable agent and the rate-controlling element, the diffusion coefficient of the therapeutic capable agent across (or through the matrix) the rate-controlling element. Thus, depending on the nature of the drug and the desired therapeutic dosages (e.g., total flux (µg/day ~~ug/day~~)) and the design of the device (e.g., total area of the device including therapeutic capable agent), the various properties (e.g., physical and/or chemical) may be configured to bring about the desired result.

[50] The therapeutic capable agent may be made available at an initial phase and one or more subsequent phases. When the therapeutic capable agent is delivered at different phases, the initial delivery rate will typically be from about 0 to about 99 % of the subsequent release rates, usually from about 0 % to about 90 %, preferably from about 0 % to 75 %. In an embodiment a mammalian tissue concentration of the substance at an initial phase will typically be within a range from about 0.001 nanogram (ng)/mg of tissue to about 100 µg/mg ~~ug/mg~~ of tissue; from about 1 ng/mg of tissue to about 100 µg/mg ~~ug/mg~~ of tissue; from about 1 ng/mg of tissue to about 10 µg/mg ~~ug/mg~~ of tissue. A mammalian tissue concentration of the substance at a subsequent phase will typically be within a range from about 0.001 ng/mg of tissue to about 600 µg/mg ~~ug/mg~~ of tissue, preferably from about 1 ng/mg of tissue to about 10 µg/mg ~~ug/mg~~ of tissue.

[51] The rate of delivery during the initial phase will typically range from about 0.001 ng to about 50 µg ~~ug~~ per day, usually from about 0.1 µg ~~ug~~ to about 30 µg ~~ug~~ per day, more preferably, from about 1 µg ~~ug~~ per day to about 20 µg ~~ug~~ per day. The rate of delivery at the subsequent phase may range from about 0.01 µg ~~ug~~ per day to about 200 µg ~~ug~~ per day, usually from about 1µg ~~ug~~ per day to about 100 µg ~~ug~~ per day. In one embodiment, the therapeutic capable agent is made available to the susceptible tissue site in a programmed and/or controlled manner with increased efficiency and/or efficacy. Moreover, the present invention provides limited or reduced hindrance to endothelialization of the vessel wall.

Please replace paragraph **[88]** with the following amended paragraph:

[88] The source 25 for making the therapeutic capable agent available to therapeutic capable agent is associated with expandable structure, in one or more configurations. The source as shown in FIGS. 2A and 2B is within the expandable structure 16, as for example, when a matrix 40 is formed by the expandable structure 16 and the therapeutic capable agent 28, or when the therapeutic capable agent 28 is disposed within the interior (or the exterior of the expandable structure 16 as the case may be), 37 of the expandable structure 16. In an embodiment, the source 25 has a thickness typically in a range from about 1 angstroms (A) to about 50 microns (μm ~~um~~), from about 100 angstroms to about 20 microns, usually from about 100 angstroms to about 10 microns, normally from about 5000 angstroms to about 5 microns, and nominally from abut 7500 angstroms to about 2 microns.

Please replace paragraph **[124]** with the following amended paragraph:

[124] The thickness of the rate-controlling element, such as the nonporous rate-controlling element layer can range from about 50 angstroms (A) to about 50 microns (μm ~~um~~), from about 100 angstroms to about 20 microns, usually from about 100 angstroms to about 10 microns, normally from about 5000 angstroms to about 5 microns, and nominally from abut 7500 angstroms to about 2 microns.

Please replace paragraph **[134]** with the following amended paragraph:

[134] The embodiments including the at least one aperture may particularly be helpful in controllably increase the release rate of the therapeutic capable agent to greater than 2 μg/day ~~ug/day~~, preferably greater than about 5 μg/day ~~ug/day~~, and more preferably greater than about 10 μg/day ~~ug/day~~; where the rate without the apertures may have been less than 50 μg/day ~~ug/day~~, preferably less than 5 μg/day ~~ug/day~~, more preferably less than 2 μg/day ~~ug/day~~.

Please replace paragraph **[167]** with the following amended paragraph:

[167] The thickness of the therapeutic capable agent and/or the matrix coating may be controlled by the time period of spraying and the speed of rotation of the mandrel. The thickness of the therapeutic capable agent and/or matrix coating is typically in a range from about 1

angstroms (A) to about 50 microns (μm ~~um~~), from about 100 angstroms to about 20 microns, usually from about 100 angstroms to about 10 microns, normally from about 5000 angstroms to about 5 microns, and nominally from abut 7500 angstroms to about 2 microns. Once the stent has been coated with the therapeutic capable agent and/or the matrix, the stent may be placed in a vacuum, oven, or vacuum oven to complete the evaporation of the solvent.

Please replace paragraph **[195]** with the following amended paragraph:

[195] Example 7 - A matrix including the therapeutic capable agent, mycophenolic acid, and matrix polymer, CAB (cellulose acetate butyrate); at a mycophenolic acid loading of 70 % to 80% by weight was prepared by dissolving the therapeutic capable agent in acetone at 15 mg/ml concentration, dissolving CAB in acetone at 15 mg/ml concentration, and thereafter mixing together the mycophenolic acid and CAB solutions in 3:1 portion matrix solution. The amount of therapeutic capable agent varied from about 0.1 microgram to about 2 mg, preferably, at 600 microgram. The matrix solution was then coated onto two sets of stents (Sets A and B) by spraying them with an atomizer sprayer (EFD manufacturer) while each stent was rotated. Each stent was allowed to let dry. One matrix-coated stent was then coated with parylene as the rate-controlling barrier (about 1.1 μm ~~um~~) using methods similar to those described in Example 2. Orifices were created on the top surface (parylene rate-controlling barrier) of the stent of Set B by subjecting the surface to laser beams or needle. The orifice size can range from about 0.1 μm ~~um~~ to about 100 μm ~~um~~ in diameter. The orifice in Set B stent was about 10 μm ~~um~~ in diameter. An orifice can be about 0.003 to about 2 inches apart from the next orifice (measured as the curvilinear distance as you trace along the stent strut pattern).

Please replace paragraph **[201]** with the following amended paragraph:

[201] Example 12 - A therapeutic capable agent, mycophenolic acid, was prepared by dissolving the therapeutic capable agent in acetone at 15 mg/ml concentration. The amount of therapeutic capable agent varied from about 0.1 μg ~~ug~~ to about 2 mg, preferably, at 600 μg ~~ug~~. The drug solution was then coated onto or over a stent as described in Example 8 by spraying them with an atomizer sprayer (EFD manufacturer) while the stent was rotated. The stent was allowed to let dry. The stent was then placed over the tri-fold balloon on a PTCA catheter and

crimped thereon. After crimping, the drug remained intact and attached to the stent. Expansion of the stent against a simulated Tecoflex vessel showed no cracking of the drug. Exposure of fluid flow over the stent before stent deployment against the simulated vessel did not result in drug detachment from the stent.

Please replace paragraph **[203]** with the following amended paragraph:

[203] Example 14 – A series of stainless steel Duraflex™ stent, having dimensions of approximately 3.5 mm x 18 mm were sprayed with about 600 µg ~~ug~~ of therapeutic capable agent using a solution of 15 mg/ml therapeutic capable agent in a 100 % methanol solvent. The stents were dried and the solvent was evaporated leaving the therapeutic capable agent on the stents surfaces. Parylene C was then vacuum deposited on the stents to serve as a rate-controlling barrier. The amount/thickness of the parylene was varied so as to create stents having different rate-controlling element thicknesses. The coated stents were place in porcine serum at 37°C. The therapeutic capable agent was eluted from the stents over a period of time and the amount eluted was measured using HPLC. As can be seen from FIG. 22, the elution rate for the stents decreased as the thickness of the rate-controlling element increased.

Please replace paragraphs **[205-206]** with the following amended paragraphs:

[205] Example 16 – A series of stainless steel Duraflex™ stents, having dimensions of approximately 3.5 mm x 18 mm were first masked on the higher stress areas of the stents, according to the embodiment described with respect to FIG. 14C with a tape. The stents were then sprayed with 600 µg ~~ug~~ of therapeutic capable agent using a solution of 15 mg/ml mycophenolic acid as the therapeutic capable agent in a 100 % methanol solvent. The stents were dried and the solvent was evaporated leaving the therapeutic capable agent on the lower stress areas of the stents. The mask was removed and Parylene C was then vacuum deposited on the stents to serve as a rate-controlling element with a nominal thickness of about 1.1 micron. The therapeutic capable agent was eluted from the stents over a period of time. As can be seen from FIG. 24, the stent having been coated with the therapeutic capable agent only on the low stress areas (using masking) elutes at a lower amount than the one coated with the therapeutic

capable agent on both the high and low stress areas, allowing for a more controlled release of the therapeutic capable agent.

[206] Example 17 – A series of stainless steel Duraflex™ stents, having dimensions of approximately 3.5 mm x 18 mm were sprayed with 300 µg ~~ug~~ of therapeutic capable agent using a solution of 15 mg/ml mycophenolic acid as the therapeutic capable agent in a 100 % methanol solvent. The stents were dried and the solvent was evaporated leaving the therapeutic capable agent on the lower stress areas of the stents. Parylene C was then vacuum deposited on the stents to serve as a rate-controlling element with a nominal thickness of about 2 to 8 microns. The therapeutic capable agent/rate-controlling element-coated stents were then divided in two groups with the second group further being heated to about 145 °C for about 1 hour. The therapeutic capable agent was eluted from the stents over a period of time. As can be seen from FIG. 25, the stent having been heated (Group B) after the final coating of the device had a lower amount of therapeutic capable agent released over the same period of time.